

Please type a plus sign (+) inside this box →

9/19/03


PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	
				Filing Date	
				First Named Inventor	A. A. Betin
				Group Art Unit	
				Examiner Name	
Sheet	1	of	2	Attorney Docket Number	PD-03W101

[illegible][illegible]

Examiner Signature		Date Considered	3/20/06
-----------------------	---	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → ☐

PTO/SB/088 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	A. A. Betin
		Group Art Unit	
		Examiner Name	
Sheet 2	of 2	Attorney Docket Number	PD-03W101

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
PN	✓	D. M. PEPPER, "Nonlinear Optical Phase Conjugation", Optical Engineering, Vol. 21, No. 2, P. 156, 1982	
	✓	R. A. FISHER (ed.), "Optical Phase Conjugation", Academic Press, New York, 1983	
		V. WANG and C. R. GIULIANO, "Correction of Phase Aberrations via Stimulated Brillouin Scattering", Optics Letters 2, P. 4 (1978)	
		D. A. ROCKWELL and D. S. SUMIDA, "Phase Conjugation, Beam Combining and Diagnostics", SPIE Vol. 739 pp. 2-6, 1987	
		A. BETIN, "Phase Conjugation Based on Thermal Nonlinearity", NThB1 at Nonlinear Optics: Materials, Fundamentals, and Applications Conference, Maui, Hawaii, July 1996, Techn. Digest, v. 11, p. 336-339	
		A. BETIN, "Energy Characteristics of a Loop Laser with a Thermal Holographic Mirror Using Millisecond Pulses at 1.06 um", Nonlinear Optics: Materials, Fundamentals, and Applications Conf., Maui, HI July 1996, Techn. Digest v. 11, p. 92-93	
		A. BETIN et al., "Q-switched Nd:YAG Loop Laser with a Thermal Holographic Mirror", CThN4, CLEO'96 Anaheim, June 1996, Proc. p. 448	
		S. C. MATTHEWS et al., "Aberration Correction of ms Pulses at 1.06 um Using a Loop Conjugator with Thermal Gratings", CFF8, CLEO'96, Anaheim, June 1996, Proc. p. 510	
		A. BETIN et al., "1 ms Long Pulse Nd:YAG Laser with Loop PCM", CLEO'97, Baltimore, May 1997, Proc. p. 283	
		A. BETIN et al., "Vector Phase Conjugation with Loop Laser Geometry", Proceedings for CLEO'97, Paper CtuL4, pp. 202-203, May 1997	
		A. BETIN et al., "Phase Conjugation of Depolarized Light with a Loop PCM", Nonlinear Optics: Materials, Fundamentals and Applications Conference, Kauai, Hawaii, August 1998, Techn. Digest, p. 288-290	

Examiner Signature		Date Considered	8/20/06
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



(Use as many sheets as necessary)

Sheet	01	of	01
-------	----	----	----

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
to a collection of information unless it contains a valid OMB control number.

Complete if Known

Application Number	10/666,176
Filing Date	September 19, 2003
First Named Inventor	Alexander A. Betin
Art Unit	2828
Examiner Name	Minsun Oh Harvey
Attorney Docket Number	PD-03W101

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

**Examiner
Signature**

Date Considered

3/20/08

*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). *See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.